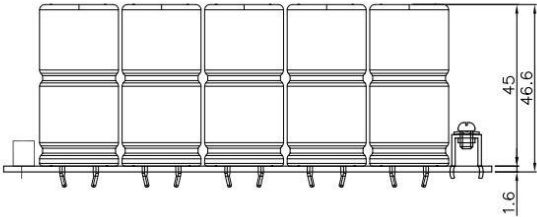
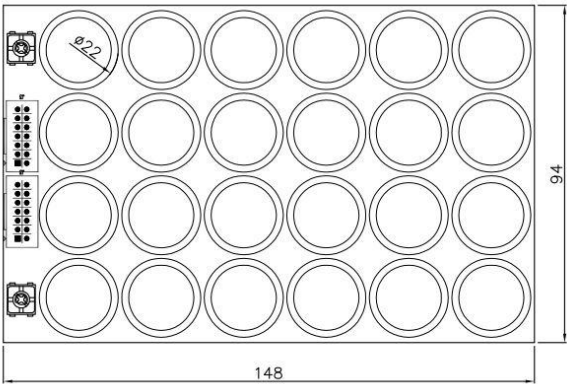


FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M3.5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



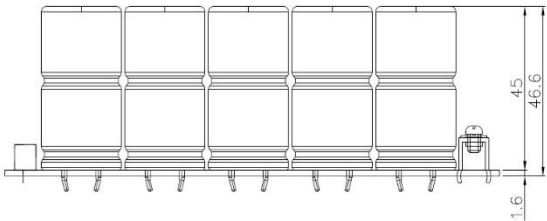
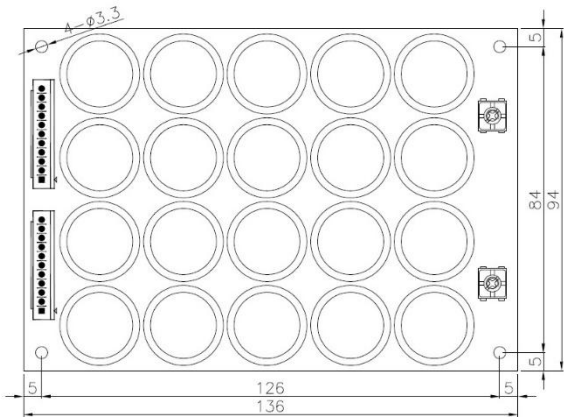
SPECIFICATION

ELECTRICAL	VEM60R0415QG
Rated Capacitance	4.15 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	154 mΩ
Rated Voltage	60V
Rated Current(Output Terminal)	20A
Leakage(72hr) + Balancing Current, maximum	5.4mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	550g
Power Terminal	M3.5 Thread
Recommended Torque-Terminal	0.8 Nm
POWER & ENERGY	
Stored Energy	2.43Wh
LIFE	
High Temperature (1,000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M3.5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



SPECIFICATION

ELECTRICAL	VEM60R0505QG
Rated Capacitance	5.0 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	120 mΩ
Rated Voltage	54V
Rated Current(Output Terminal)	30A
Leakage(72hr) + Balancing Current, maximum	3.3mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	450g
Power Terminal	M3.5 Thread
Recommended Torque-Terminal	0.8 Nm
POWER & ENERGY	
Stored Energy	2.50Wh
LIFE	
High Temperature (1,000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES

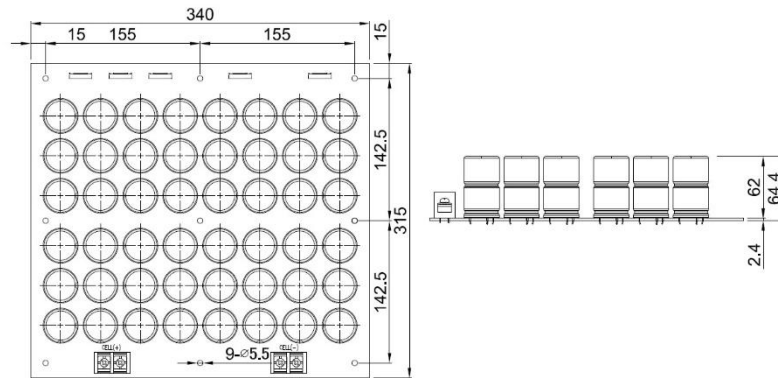
- Ultra-low internal resistance
- Highest power performance available
- Over 500,000 duty cycles
- Compact design
- Output Terminal M5 Thread

TYPICAL APPLICATIONS

- Automotive
- Industrial
- Telecommunications
- Transportation
- Uninterruptible Power Supplies(UPS)
- Wind turbines

Drawing

unit: mm



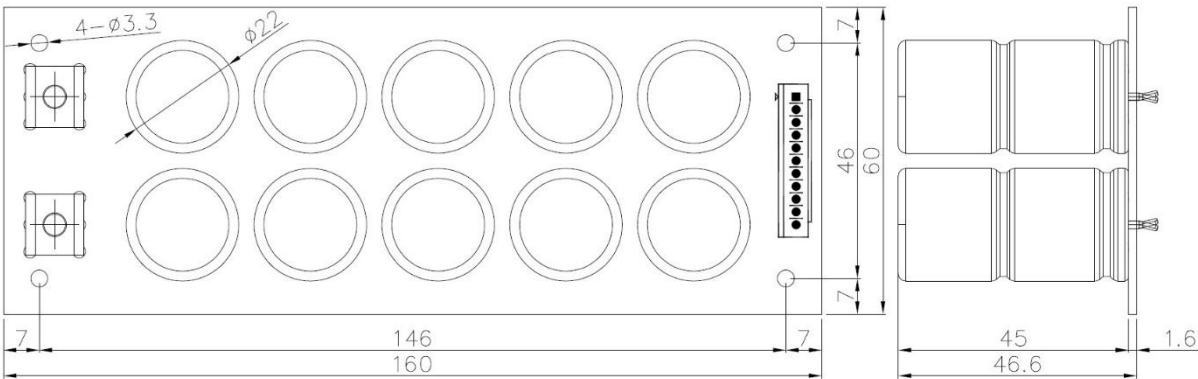
SPECIFICATION

ELECTRICAL	VEM144R0755QG
Rated Capacitance	7.5 F
Capacitance Tolerance	-10 ∞ +30%
Maximum ESR _{AC} initial	154 mΩ
Rated Voltage	134.4 V
Continuous Current	50 A
Leakage(72) + Balancing Current , maximum	103 mA
TEMPERATURE	
Operating Temperature	-40°C ∞ 65°C
Storage Temperature	-40°C ∞ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE & ACTIVE
PHYSICAL	
Mass, typical	4.0 kg
Power Terminals	M5 Thread
Recommended Torque-Terminal	49 Nm
POWER & ENERGY	
Stored Energy	21.6 Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of initial value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



SPECIFICATION

ELECTRICAL	VEM30R0106QG
Rated Capacitance	10.0 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	65 mΩ
Rated Voltage	28V
Rated Current(Output Terminal)	30A
Leakage(72hr) + Balancing Current, maximum	3.3mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	350g
Power Terminal	M5 Thread
Recommended Torque-Terminal	7 Nm
POWER & ENERGY	
Stored Energy	1.25Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES

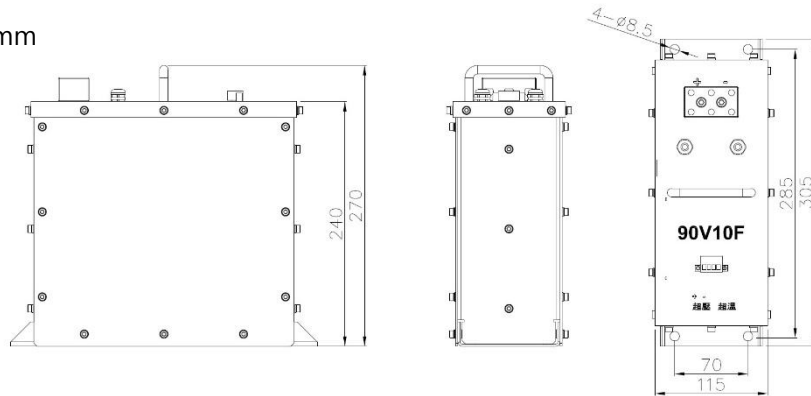
- Ultra-low internal resistance
- Highest power performance available
- Over 500,000 duty cycles
- Compact, rugged, fully enclosed splash proof design

TYPICAL APPLICATIONS

- Automotive
- Industrial
- Telecommunications
- Transportation
- Uninterruptible Power Supplies(UPS)
- Wind turbines

Drawing

unit: mm



SPECIFICATION

ELECTRICAL	VEM90R0106QG
Rated Capacitance	10.0 F
Capacitance Tolerance	-10 ∞ +30%
Maximum ESR _{AC} , initial	140 mΩ
Rated Voltage	90 V
Continuous Current	30 A
Leakage(72) + Balancing Current , maximum	4 mA
TEMPERATURE	
Operating Temperature	-40°C ∞ 65°C
Storage Temperature	-40°C ∞ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE & ACTIVE
PHYSICAL	
Mass, typical	7.6 kg
Power Terminals	M4 Thread
Recommended Torque-Terminal	7 Nm
POWER & ENERGY	
Stored Energy	16.20 Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of initial value, ESR: Within 2 times of initial value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES

- Ultra-low internal resistance
- Highest power performance available
- Over 500,000 duty cycles
- Compact, rugged, fully enclosed splash proof design

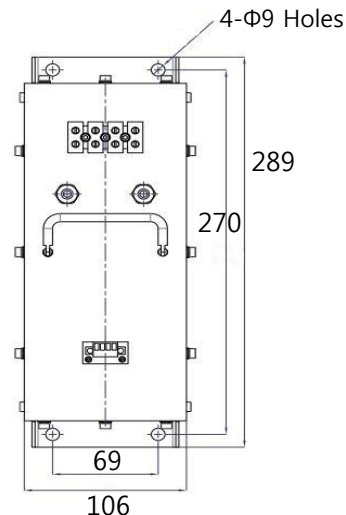
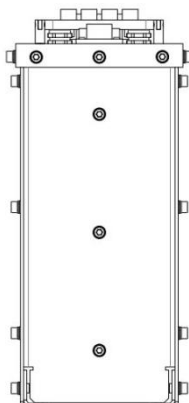
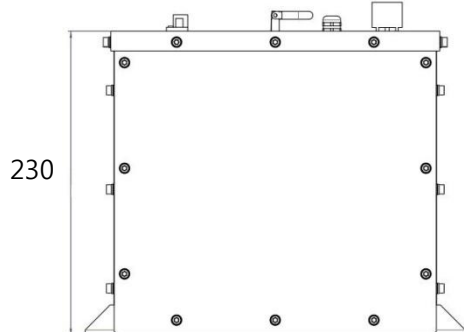
TYPICAL APPLICATIONS

- Automotive
- Industrial
- Telecommunications
- Transportation
- Uninterruptible Power Supplies(UPS)
- Wind turbines



Drawing

unit: mm

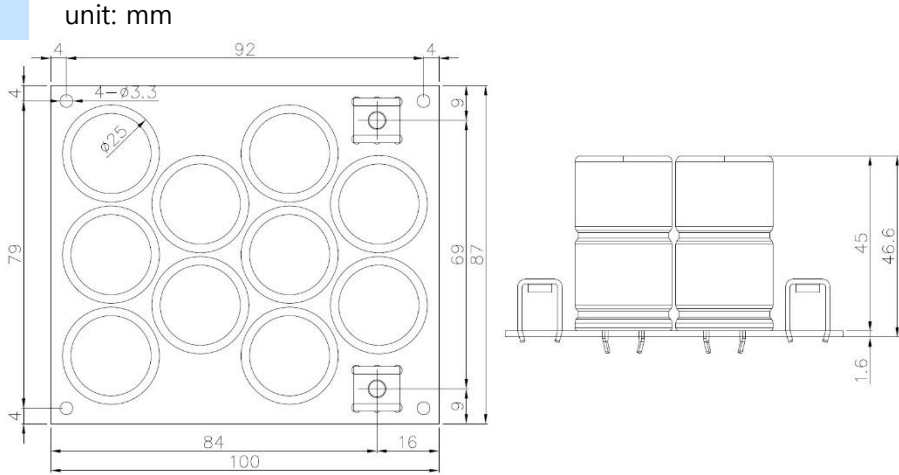


SPECIFICATION

ELECTRICAL	VEM100R0106QG
Rated Capacitance	10 F
Maximum ESR _{AC} initial	136 mΩ
Rated Voltage	100 V
Maximum Continuous Current	60A
Leakage Current, maximum	2mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	ACTIVE
PHYSICAL	
Mass, typical	7.6 kg
Power Terminals	M4 Thread
POWER & ENERGY	
Usable Specific Power	1,161 W/kg
Specific Energy, E _{max}	1.83 Wh/kg
Stored Energy	13.90 Wh
LIFE	
High Temperature (1500 hours)	Capacitance: -20% of initial value, ESR: Within 2 times of initial value
Room Temperature (25°C)	Capacitance: -20% of initial value, ESR: Within 2 times of initial value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing



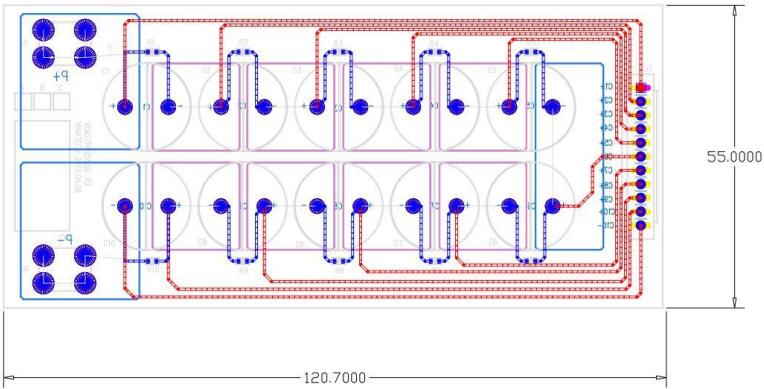
SPECIFICATION

ELECTRICAL	VEM30R0126QG
Rated Capacitance	12.0 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	65 mΩ
Rated Voltage	27V
Max Current(Output Terminal)	30A
Leakage(72hr) + Balancing Current, maximum	3.1mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	430g
Power Terminal	M5 Thread
Recommended Torque-Terminal	7 Nm
POWER & ENERGY	
Stored Energy	1.50Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M3.5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



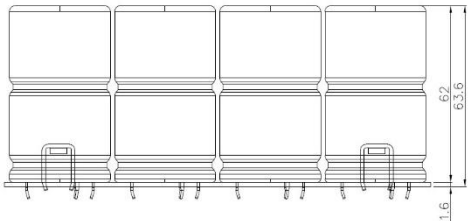
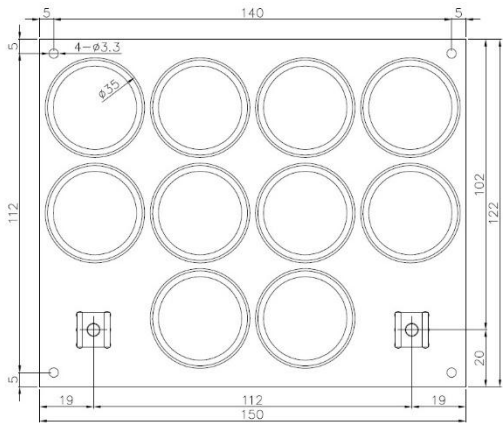
SPECIFICATION

ELECTRICAL	VEM27R0255QG
Rated Capacitance	25 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	180 mΩ
Rated Voltage	27V
Rated Current(Output Terminal)	5.2A
Leakage(72hr) + Balancing Current, maximum	5.4mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	68g
Power Terminal	M3.5 Thread
Recommended Torque-Terminal	0.8 Nm
POWER & ENERGY	
Stored Energy	0.25Wh
LIFE	
High Temperature (1,000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



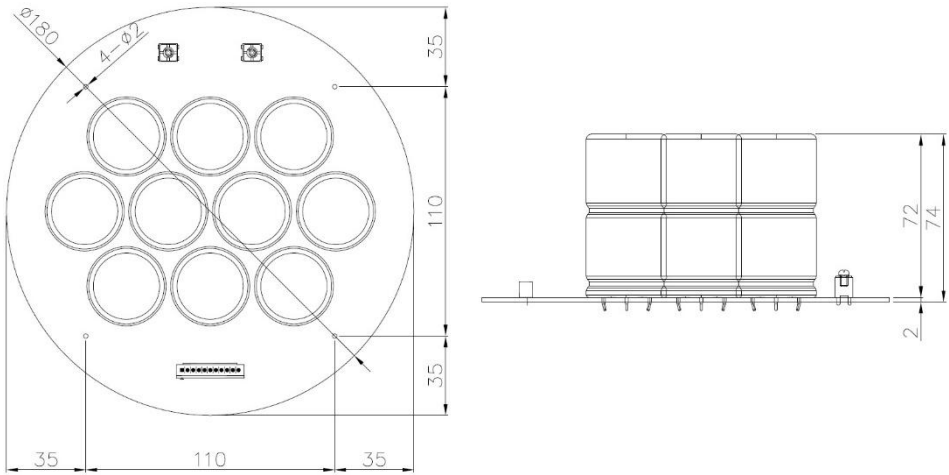
SPECIFICATION

ELECTRICAL	VEM30R0366QG
Rated Capacitance	36.0 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	40 mΩ
Rated Voltage	27V
Max Current(Output Terminal)	30A
Leakage(72hr) + Balancing Current, maximum	12.3mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE
PHYSICAL	
Mass, typical	850g
Power Terminal	M5 Thread
Recommended Torque-Terminal	7 Nm
POWER & ENERGY	
Stored Energy	4.50Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

FEATURES	TYPICAL APPLICATIONS
- Ultra-low internal resistance - Highest power performance available - Over 500,000 duty cycles - Compact design - Output Terminal M3.5 Thread	- Automotive - Industrial - Telecommunications - Transportation - Uninterruptible Power Supplies(UPS) - Wind turbines

Drawing

unit: mm



SPECIFICATION

ELECTRICAL	VEM30R0406QG
Rated Capacitance	40.0 F
Capacitance Tolerance	-10 ~ +30%
Maximum ESR _{AC} , initial	40 mΩ
Rated Voltage	28V
Rated Current(Output Terminal)	30A
Leakage(72hr) + Balancing Current, maximum	12.3mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	PASSIVE + ACTIVE
PHYSICAL	
Mass, typical	1.1kg
Power Terminal	M3.5 Thread
Recommended Torque-Terminal	0.8 Nm
POWER & ENERGY	
Stored Energy	5.00Wh
LIFE	
High Temperature (1000 hours)	Capacitance: -30% of specification value, ESR: Within 2 times of specification value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)

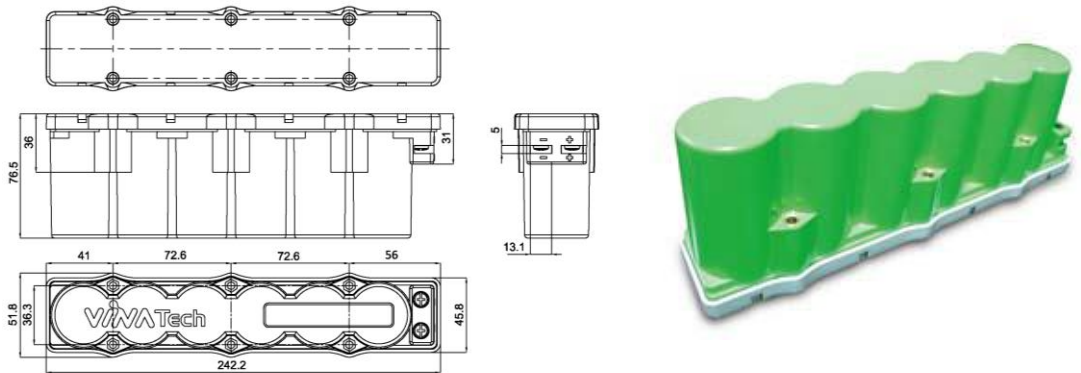
FEATURES

- Ultra-low internal resistance
- Highest power performance available
- Over 500,000 duty cycles
- Compact, rugged, fully enclosed splash proof design

TYPICAL APPLICATIONS

- Automotive
- Industrial
- Telecommunications
- Transportation
- Uninterruptible Power Supplies(UPS)
- Wind turbines

Drawing



SPECIFICATION

ELECTRICAL	VEM16R0606QG
Rated Capacitance	60 F
Maximum ESR _{DC} initial	22 mΩ
Rated Voltage	16 V
Maximum Continuous Current	20A
Leakage Current, maximum	25mA
TEMPERATURE	
Operating Temperature	-40°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
CELL VOLTAGE MANAGEMENT	
CELL Voltage Management	ACTIVE
PHYSICAL	
Mass, typical	0.67 kg
Power Terminals	M5 Thread
Environmental Protection	IP54
POWER & ENERGY	
Usable Specific Power	2,400 W/kg
Specific Energy, E _{max}	3.33Wh/kg
Stored Energy	2.13Wh
LIFE	
High Temperature (1500 hours)	Capacitance: -20% of initial value, ESR: Within 2 times of initial value
Room Temperature (25°C)	Capacitance: -20% of initial value, ESR: Within 2 times of initial value
Cycle Life	500,000 cycles(Cycle of charge/discharge from VR to 1/2VR)